



# Welcome & Introductions

Council Member Diane Hofstede



### **Presentation Outline**

- Project Overview
- Project Process
  - Alternatives Development
  - Evaluation Methodology
  - Analysis Results
- Next Steps

## Project Overview



## **Project History**

- Southeast Minneapolis Industrial Area (SEMI)
  - SEMI/Bridal Veil Master Plan 2001
- Central Corridor LRT
  - Memorandum of Understanding for Washington Avenue Pedestrian/Transit Mall - 2008
- Minneapolis Public Works
  - Capital Improvement Program
    - Malcolm Ave SE extension 2008
    - 25<sup>th</sup> Ave SE extension 2011



## **Project History**





## **Project History**

- Many other planning efforts, including:
  - Minneapolis Park Board
    - Missing Link Development Study Report 2008
  - University District Alliance
    - Transforming the Materiality of the Void 2010
  - Minneapolis Public Works
    - Analysis of Rail Operations in the Granary Road Corridor - 2010



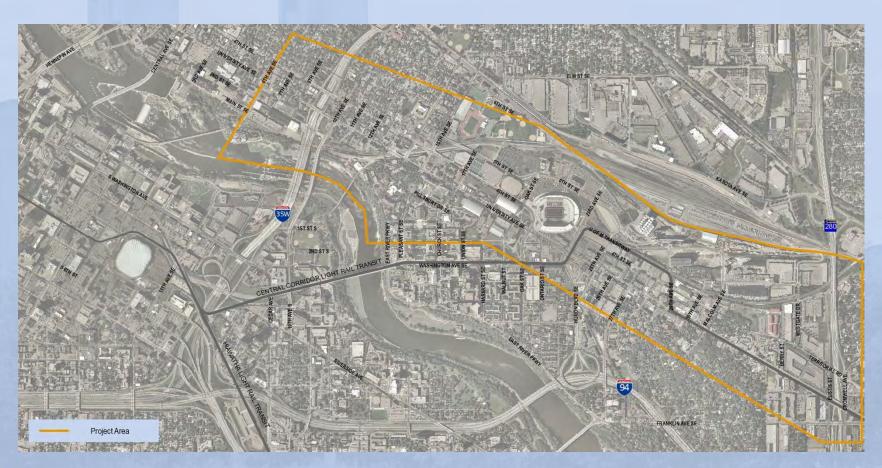
### **Project Stakeholders**

- City of Minneapolis\*
- Hennepin County\*
- University of Minnesota\*
- University District Alliance\*
- Minneapolis Park and Recreation Board \*
- Metropolitan Council/Central Corridor Project Office
- City of Saint Paul
- Marcy Holmes Neighborhood Association\*

- Prospect Park East River Road
   Improvement Association
- Nicollet Island East Bank
   Neighborhood Association
- Minneapolis Riverfront Partnership
- Southeast Business Association
- Dinkytown Business Association
- Stadium Village Improvement Association



## Project Study Area

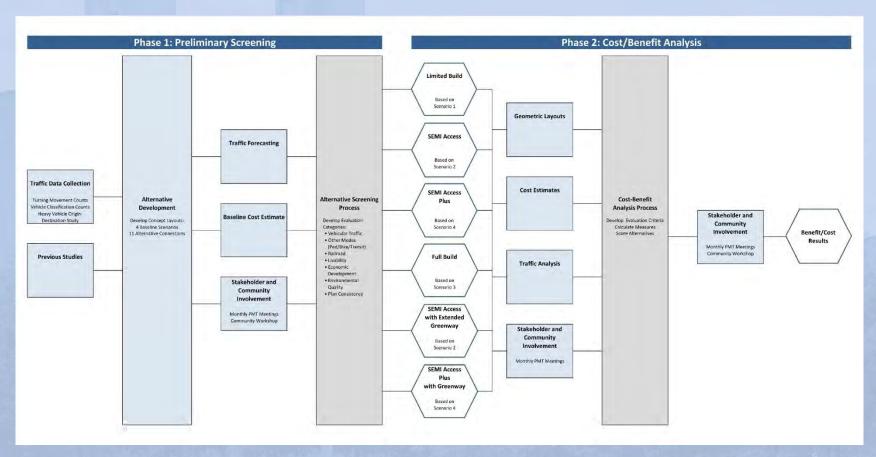


## Project Process



#### Kimley-Horn and Associates, Inc.

## **Project Process**





### Phase 1 Alternatives

- Baseline Scenarios
  - Phasing as well as long-term plan for the corridor
  - Consider alternative transportation
- Alternative Connections
  - Evaluate full range of benefits and impacts

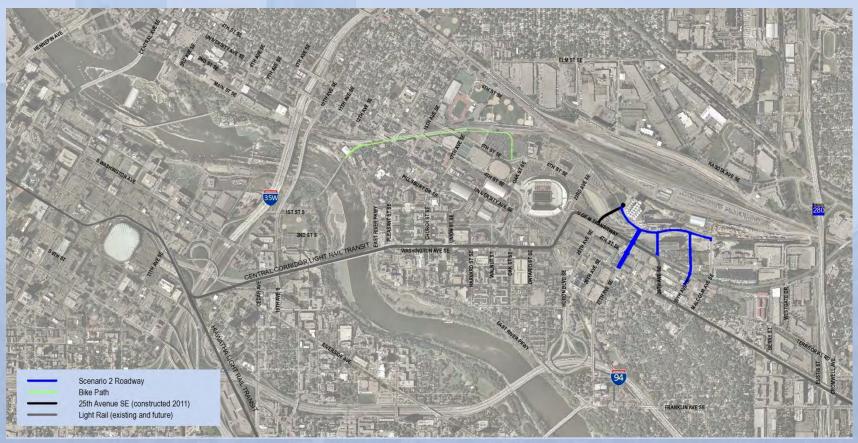


## Phase 1 Alternatives – Baseline Scenario 1



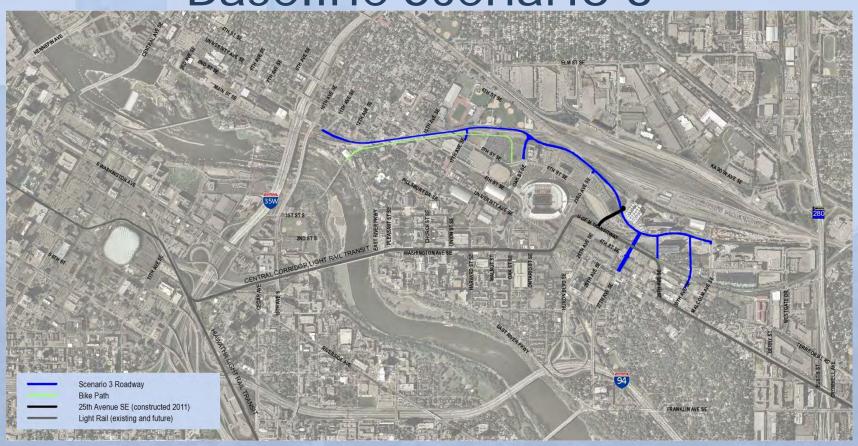


## Phase 1 Alternatives – Baseline Scenario 2



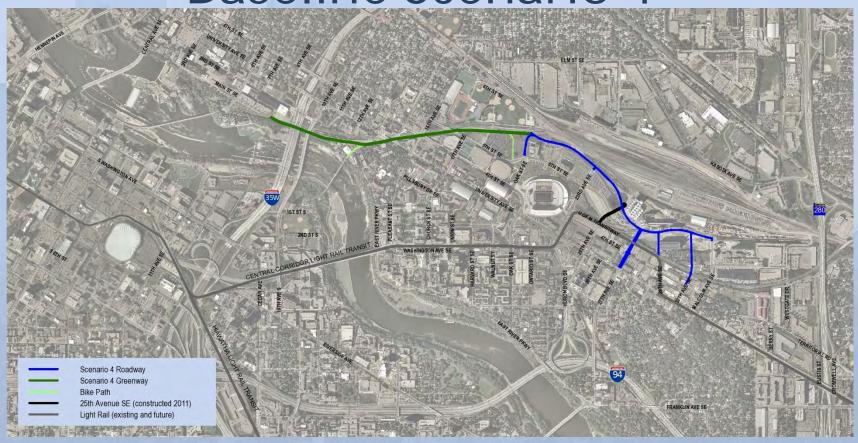


## Phase 1 Alternatives – Baseline Scenario 3





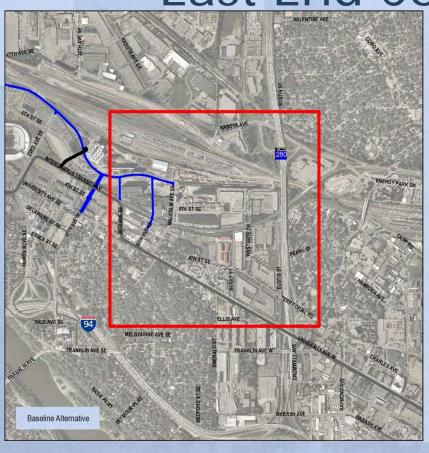
## Phase 1 Alternatives – Baseline Scenario 4







## Phase 1 Alternatives – East End Connections



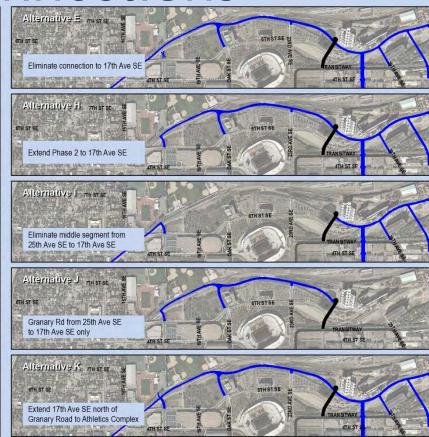






## Phase 1 Alternatives – Middle Connections



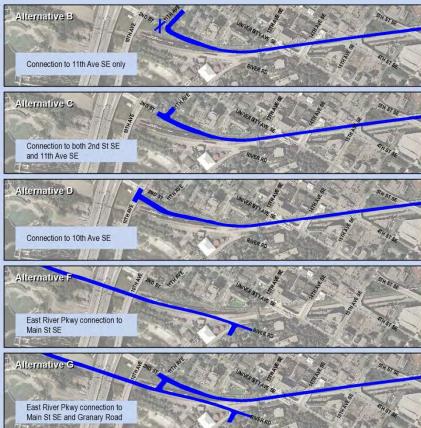






## Phase 1 Alternatives – West End Connections







## Phase 1 Screening

- Qualitative anticipated benefits (compared with baseline)
- Qualitative anticipated impacts (compared with baseline)
- Quantitative benefits/impacts
  - 2030 traffic forecasts



## Phase 1 Screening Results

- Make connection to TH 280 (Alternative A)
  - Traffic benefit to University Ave SE
  - Forecasts do not show traffic impacts east of TH 280
- Make connections to 17<sup>th</sup> Ave SE (Alternatives H and K)
  - Evaluate costs and relative benefits in more detail in Phase 2



## Phase 1 Screening Results

- Make connections to 2<sup>nd</sup> St SE and 11<sup>th</sup> Ave SE (Alternative C)
  - Greatest traffic benefit to University Ave SE and 4<sup>th</sup> St SE of all the connection alternatives
  - Greatest potential traffic impact on neighborhoods



## Phase 1 Screening Results

- East River Pkwy (Alternative F)
  - Connection to Main St SE increases traffic on East River Pkwy and on Main St SE by 1,200-2,500 vehicles/day (40-70% increase)
  - Connection of East River Pkwy to Granary Road does not draw significant additional traffic (100-500 vehicles/day)
    - Construction of East River Pkwy does not preclude Granary Road construction or vise versa

## **Proposed Evaluation Criteria**

#### VEHICULAR TRAFFIC LIVABILITY T1. Reduces traffic congestion L1. Creation of destinations, open space/public space, T2. Decreases traffic volumes on University Avenue & and points of interest 4th Street

- T3. Improves study area connectivity T4. Decreases interaction and conflicts between future traffic and other modes
- T5. Vehicular access to existing property and uses

#### OTHER MODES (BIKE/PED/TRANSIT)

- OM1. Facilitates bike and pedestrian travel
- OM2. Facilitates transit use
- OM3. Multi-modal environment and experience

#### RAILROAD

RR1. Changes to existing rail operations

#### **ENVIRONMENTAL QUALITY**

- EN1. Environmental quality (air)
- EN1. Environmental quality (noise)
- EN1. Environnemental quality (contaminated sites)
- EN2. Storm water and water quality

- L2. Connection to the Mississippi River
- L3. Cohesiveness of the community
- Improvements to visual quality
- Biodiversity
- T6. Future traffic volumes remain in acceptable thresholds for street type
- L7. Impacts of future traffic on adjacent properties and neighborhoods
- L8. Impacts on historic character/features

#### **ECONOMIC DEVELOPMENT**

- ED1. Access (all modes) to parcels identified for future development or redevelopment
- ED2. Impacts on access (all modes) to existing underutilized property not currently identified for redevelopment.

#### PLAN CONSISTENCY

- P1. Supports City of Minneapolis policies and Comprehensive Plan
- P2. Supports University of Minnesota policies and Master Plan
- Supports policies and goals of adopted neighborhood plans and other agency plans



## Workshop 1 – July 2011

- Objectives:
  - Present Phase 1 alternatives and screening to representative group of stakeholders
  - Gather input on alternatives recommended to move forward to Phase 2 analysis
  - Gather input on proposed evaluation criteria for Phase 2



## Workshop 1 – July 2011

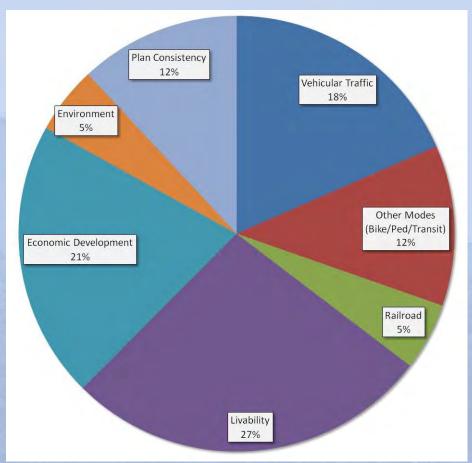
- Results:
  - Include additional greenway alternatives in the analysis
  - Evaluate an alternative that eliminates middle roadway segment
  - Criteria weighting (voting exercise)
    - Traffic
    - Other Modes (Ped/Bike/Transit)





## Workshop 1 – July 2011

- Results:
  - Criteria weighting (voting exercise)

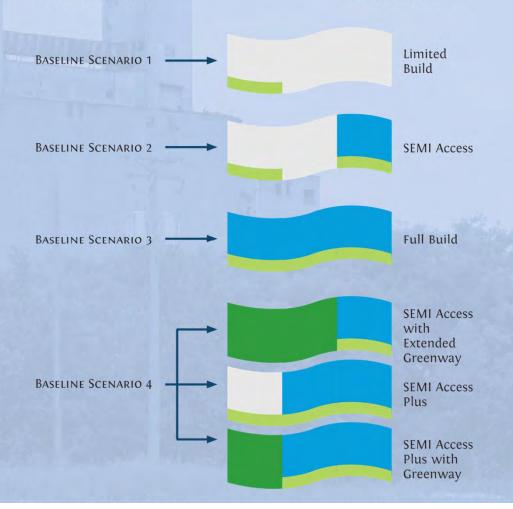


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### Phase 2 Alternatives

PHASE I ALTERNATIVES

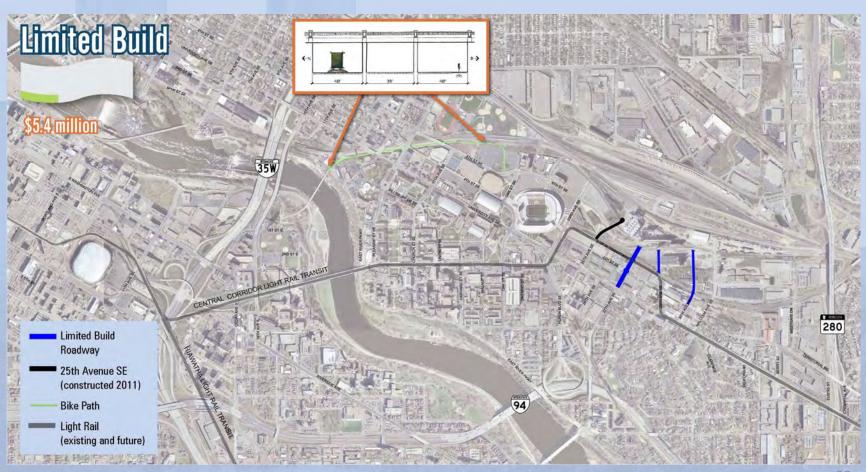
PHASE 2 ALTERNATIVES







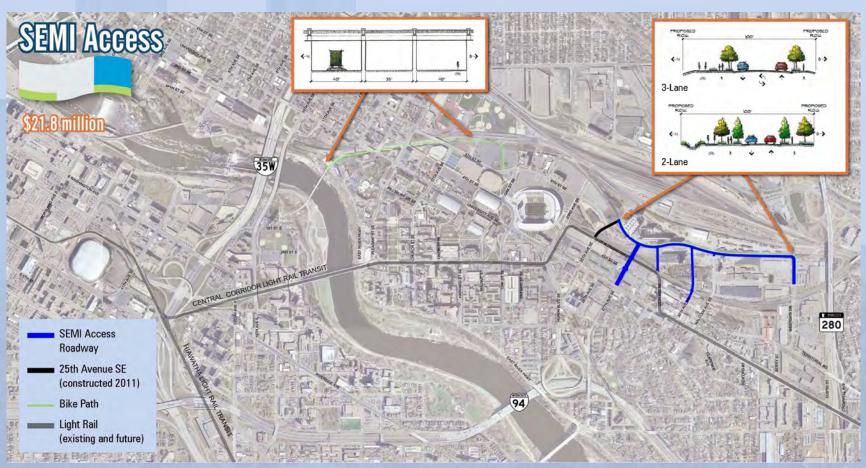
## Limited Build Alternative







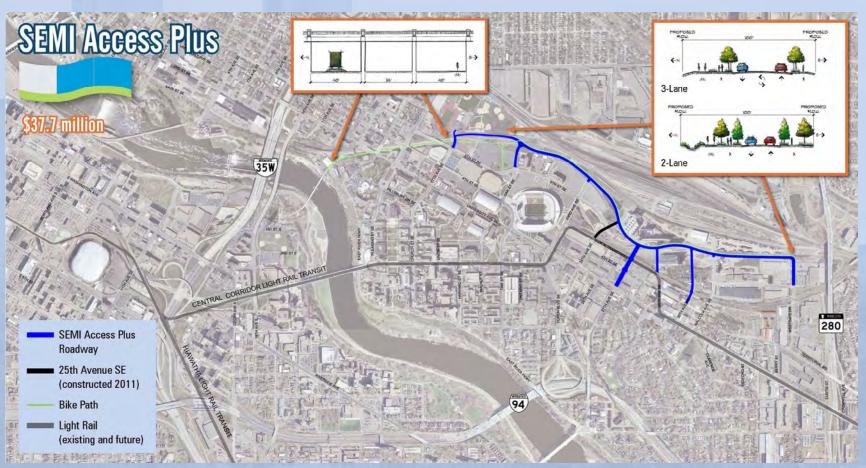
## **SEMI Access Alternative**







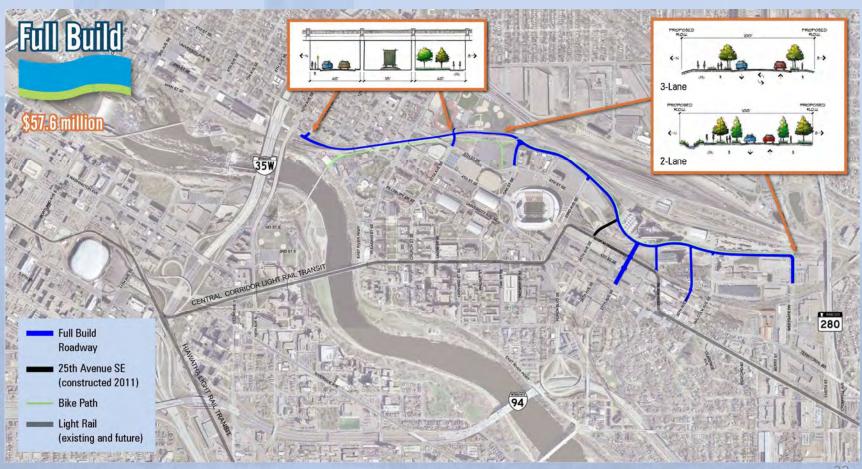
## **SEMI Access Plus Alternative**







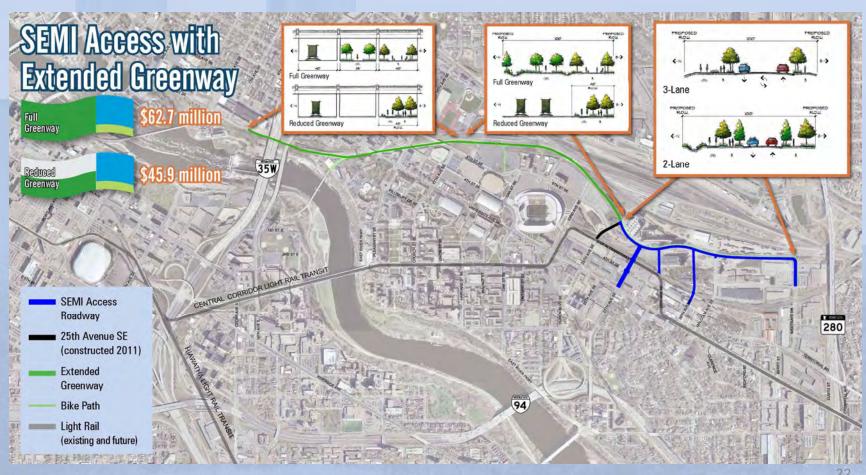
## Full Build Alternative



#### GRANARY CORRIDOR



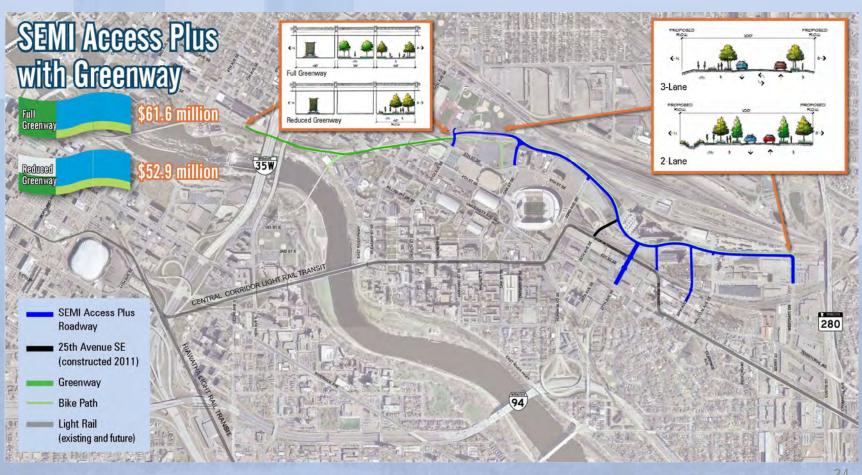
## SEMI Access with Extended Greenway **Alternatives**



#### GRANARY CORRIDOR



## SEMI Access Plus with Greenway **Alternatives**





### **Alternatives Evaluation Process**

- Establish units of measurement for each criteria
- Quantify measurements for each criteria for each of the alternatives
- Translate measurement to scores (1-5 points)
- Weight categories (based on input from Workshop 1)

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### **Alternatives Evaluation Process**

Granary Corridor Cost Benefit Analysis - Detailed Analysis and Scoring Results		Limited Build		SEMI Access		SEMI Access Plus		Full Build		SEMI Access with Extended Greenway				SEMI Access Plus with Greenway			
										SEMI Access E	SEMI Arrass Fy	SEMI Access Extended		SEMI Access Plus		SEMI Access Plus	
										Full Greenway		Reduced Greenway		Full Greenway		Reduced Greenway	
Criterion	Measurement	RESULT	SCORE (1-5)	RESULT	SCORE (1-5)	RESULT	SCORE (1-5)	RESULT	SCORE (1-5)	RESULT	SCORE (1-5)	RESULT	SCORE (1-5)	RESULT	SCORE (1-5)	RESULT	SCORI (1-5)
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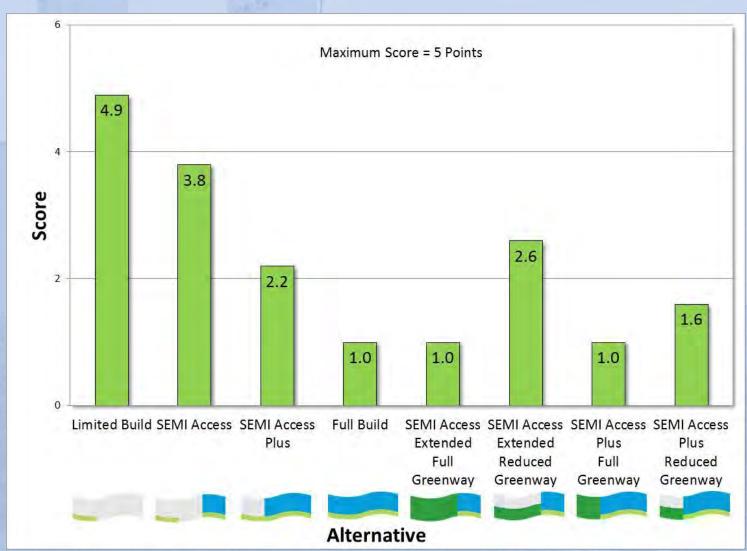


# Workshop 2 – November 2011

- Objectives:
  - Present Phase 2 analysis results to representative group of stakeholders (same group as Workshop 1)
  - Gather input on evaluation methods and scoring
- Results:
  - Add reduced greenway options
  - Adjust methods for quantifying and evaluating economic development benefits
  - Reduce weighting of plan consistency criteria

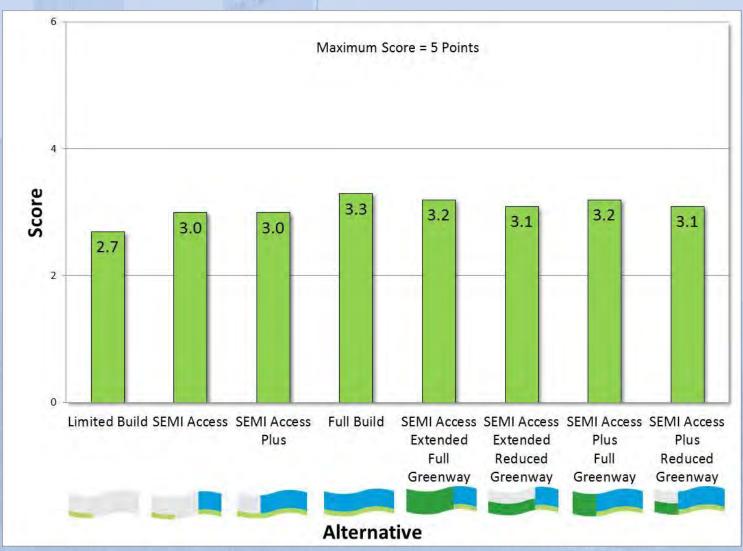


#### **Evaluation Results - Railroad**



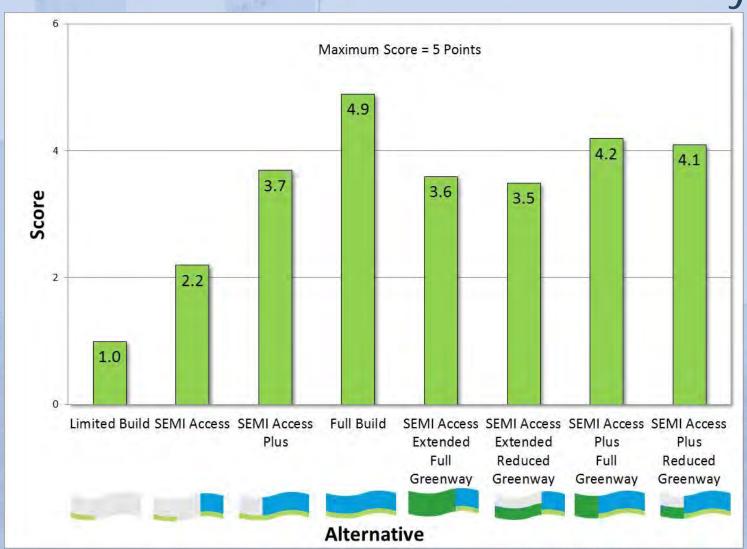


# Evaluation Results - Environmental Quality



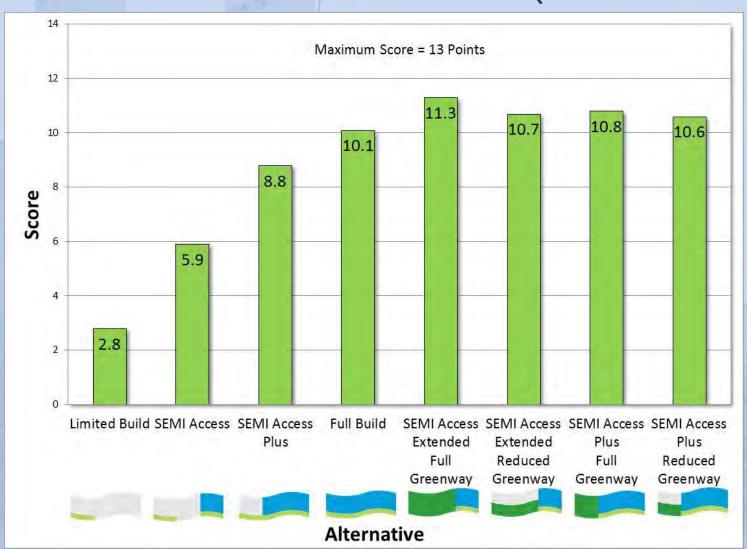


# Evaluation Results - Plan Consistency



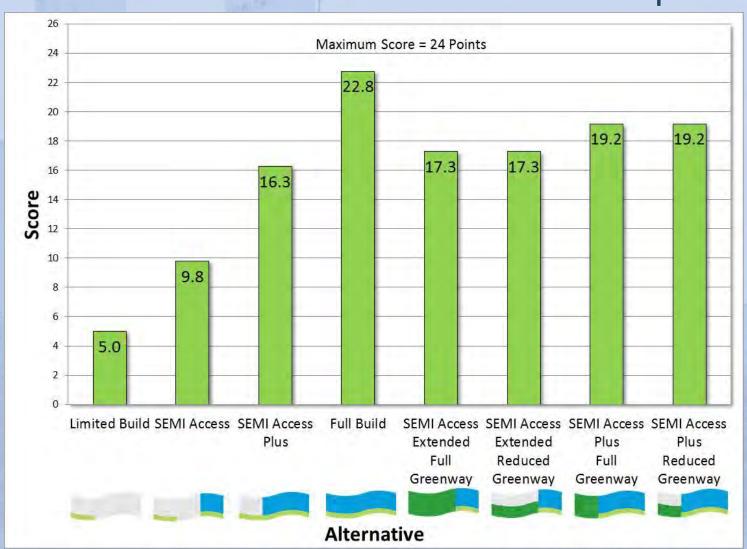


### Evaluation Results - Other Modes (Ped/Bike/Transit)



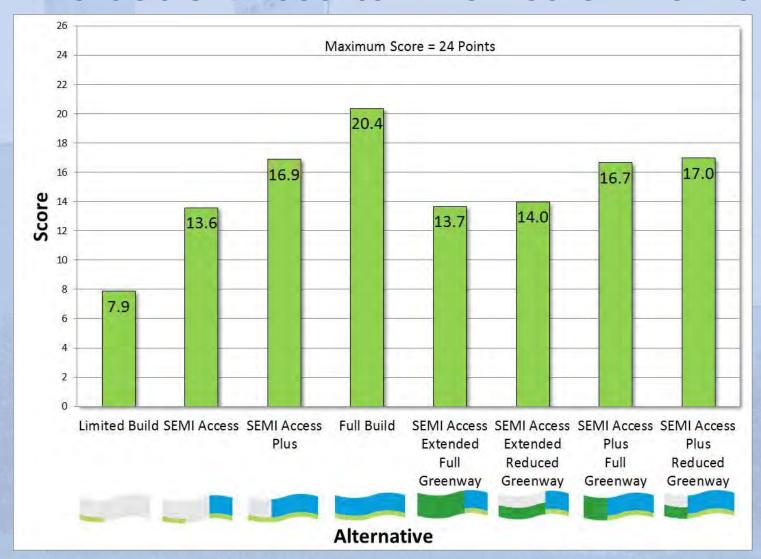


### Evaluation Results - Economic Development

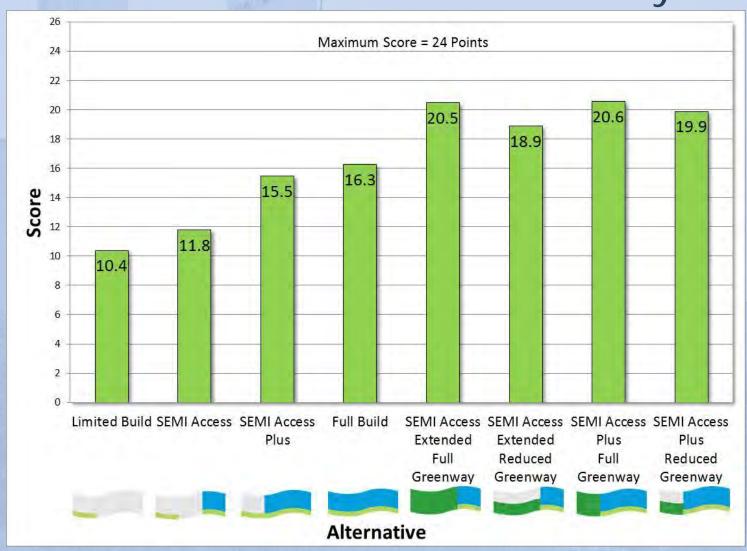




#### **Evaluation Results – Vehicular Traffic**

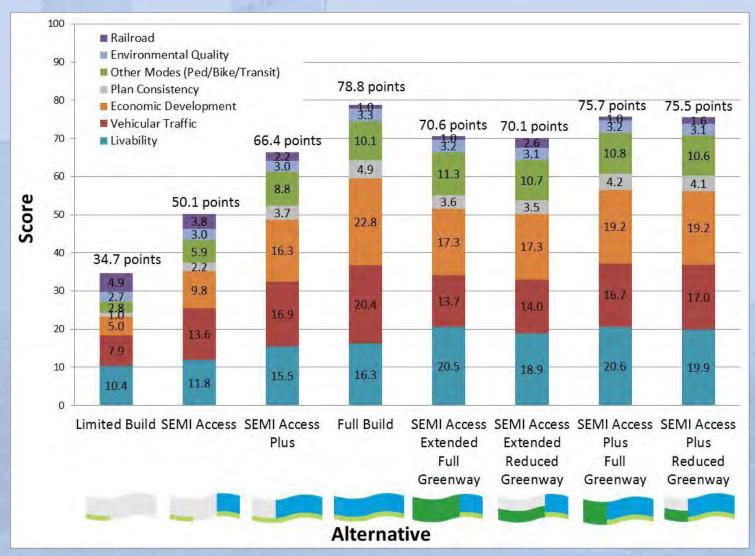


# **Evaluation Results – Livability**





#### **Evaluation Results – Total**



# Findings

Univ	ily traffic volumes on iversity Ave SE and 4 <sup>th</sup> St = 27,000-45,500 vehicles day	Daily traffic volume reduced: 3,000 vehicles on University Ave SE, Huron Blvd to TH 280 (-13%)	Daily traffic volume reduced: 3,500 vehicles on University Ave SE, Huron Blvd to TH 280 (-15%) 1,000 vehicles on University Ave SE/4" St SE, 17 <sup>th</sup> Ave SE to Huron Blvd (-2%)	Daily traffic volume reduced: 4,000 vehicles on University Ave SE, Huron Blvd to TH 280 (-17%) 2,500 vehicles on University Ave SE/4th St SE, 17th Ave SE	Full Greenway  Daily traffic volume reduced: 3,000 vehicles on University Ave SE, Huron Blvd to TH 280 (-13%)	Reduced Greenway  Daily traffic volume reduced: 3,000 vehicles on University Ave SE, Huron Blvd to TH 280 (-13%)	Full Greenway  Daily traffic volume reduced: 3,500 vehicles on University Ave SE, Huron Blvd to TH	Reduced Greenway  Daily traffic volume reduced: 3,500 vehicles on University Ave SE, Huron Blvd to TH
Univ	iversity Ave SE and 4 <sup>th</sup> St = 27,000-45,500 vehicles	3,000 vehicles on University Ave SE, Huron Blvd to TH	3,500 vehicles on University Ave SE, Huron Blvd to TH 280 (-15%) 1,000 vehicles on University Ave SE/4 <sup>th</sup> St SE, 17 <sup>th</sup> Ave SE	4,000 vehicles on University Ave SE, Huron Blvd to TH 280 (-17%) 2,500 vehicles on University	3,000 vehicles on University Ave SE, Huron Blvd to TH	3,000 vehicles on University Ave SE, Huron Blvd to TH	3,500 vehicles on University Ave SE, Huron Blvd to TH	3,500 vehicles on University
Univ	iversity Ave SE and 4 <sup>th</sup> St = 27,000-45,500 vehicles	3,000 vehicles on University Ave SE, Huron Blvd to TH	3,500 vehicles on University Ave SE, Huron Blvd to TH 280 (-15%) 1,000 vehicles on University Ave SE/4 <sup>th</sup> St SE, 17 <sup>th</sup> Ave SE	4,000 vehicles on University Ave SE, Huron Blvd to TH 280 (-17%) 2,500 vehicles on University	3,000 vehicles on University Ave SE, Huron Blvd to TH	3,000 vehicles on University Ave SE, Huron Blvd to TH	3,500 vehicles on University Ave SE, Huron Blvd to TH	3,500 vehicles on University
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				to Huron Blvd (-6%)			1,000 vehicles on University Ave SE/4 <sup>th</sup> St SE, 17 <sup>th</sup> Ave SE to Huron Blvd (-2%)	1,000 vehicles on University Ave SE/4 <sup>th</sup> St SE, 17 <sup>th</sup> Ave SE to Huron Blvd (-2%)
				5,500 vehicles on University Ave SE/4 <sup>th</sup> St SE, I-35W to 17 <sup>th</sup> Ave SE (-12%)				
at LC	ey intersections operate LOS E/F during 2030 ak hours	1 intersection on University Ave SE improves from LOS E to LOS C in 2030 PM peak	2 intersections on University Ave SE improve from LOS E to LOS C/D in 2030 PM peak	3 intersections on University Ave SE improve from LOS E to LOS C/D in 2030 PM peak	1 intersection on University Ave SE improves from LOS E to LOS C in 2030 PM peak	1 intersection on University Ave SE improves from LOS E to LOS C in 2030 PM peak	2 intersections on University Ave SE improve from LOS E to LOS C/D in 2030 PM peak	2 intersections on University Ave SE improve from LOS E to LOS C/D in 2030 PM peak
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4,00	00 feet of trail	8,000 feet of trail	11,000 feet of trail	11,000 feet of trail	4,000 feet of trail	4,000 feet of trail	7,000 feet of trail	7,000 feet of trail
					8,000 feet of greenway	8,000 feet of greenway	5,000 feet of greenway	5,000 feet of greenway
		Consistent with 2009 Grand Rounds Byway Master Plan	Consistent with 2009 Grand Rounds Byway Master Plan	Consistent with 2009 Grand Rounds Byway Master Plan	Consistent with 2009 Grand Rounds Byway Master Plan	Consistent with 2009 Grand Rounds Byway Master Plan	Consistent with 2009 Grand Rounds Byway Master Plan	Consistent with 2009 Grand Rounds Byway Master Plan
Limit	nited green space	3.8 acres green space	7.8 acres green space	9.9 acres green space	14.9 acres green space	7.5 acres green space	13.5 acres green space	9.7 acres green space
	hicle access to 6 levelopment parcels	Vehicle access to 12 redevelopment parcels	Vehicle access to 15 redevelopment parcels and 4 University parcels	Vehicle access to 15 redevelopment parcels and 7 University parcels	Vehicle access to 12 redevelopment parcels	Vehicle access to 12 redevelopment parcels	Vehicle access to 15 redevelopment parcels and 4 University parcels	Vehicle access to 15 redevelopment parcels and 4 University parcels
	nd use projections = 220 useholds and 700 jobs	Land use projections = 550 households and 1,750 jobs	Land use projections = 690 households and 2,650 jobs	Land use projections = 1,330 households and 4,500 jobs	Land use projections = 980 households and 3,400 jobs	Land use projections = 980 households and 3,400 jobs	Land use projections = 1,010 households and 3,580 jobs	Land use projections = 1,010 households and 3,580 jobs
	quires 0.2 acres of road right-of-way	Requires 3.9 acres of railroad right-of-way	Requires 9.4 acres of railroad right-of-way	Requires 13.6 acres of railroad right-of-way	Requires 13.6 acres of railroad right-of-way	Requires 8.8 acres of railroad right-of-way	Requires 13.6 acres of railroad right-of-way	Requires 11.5 acres of railroad right-of-way
				At-grade rail crossing near 17 <sup>th</sup> Ave SE				
Impacts				Traffic volumes increased				
				1,500-2,000 vehicles per day on 2 <sup>nd</sup> St SE, 8 <sup>th</sup> Ave SE, and 11 <sup>th</sup> Ave SE				
Cost	st \$5.4 million	Cost \$21.8 million	Cost \$37.7 million	Cost \$57.6 million	Cost \$62.7 million	Cost \$45.9 million	Cost \$61.6 million	Cost \$52.9 million



# Findings

- More Investment = More Benefit
  - Full length alternatives (Full Build and Greenway)
     have highest costs and highest scores
- Cost/Benefit Ratios
  - Diminishing Returns
    - SEMI Access score is 1.4x Limited Build score, but at 4.0x the cost
    - Full Build score is 1.6x SEMI Access score, but at 2.8x the cost
  - Reduced Greenway alternatives have similar scores to Full Greenway, but at lower cost

# **Next Steps**

- Final Report May 2012
- Minneapolis Public Works meeting with decision makers from partner agencies
  - Consider project benefits and costs relative to citywide needs and budgets
  - Railroad right-of-way acquisition and impacts to existing railroad operations will be key